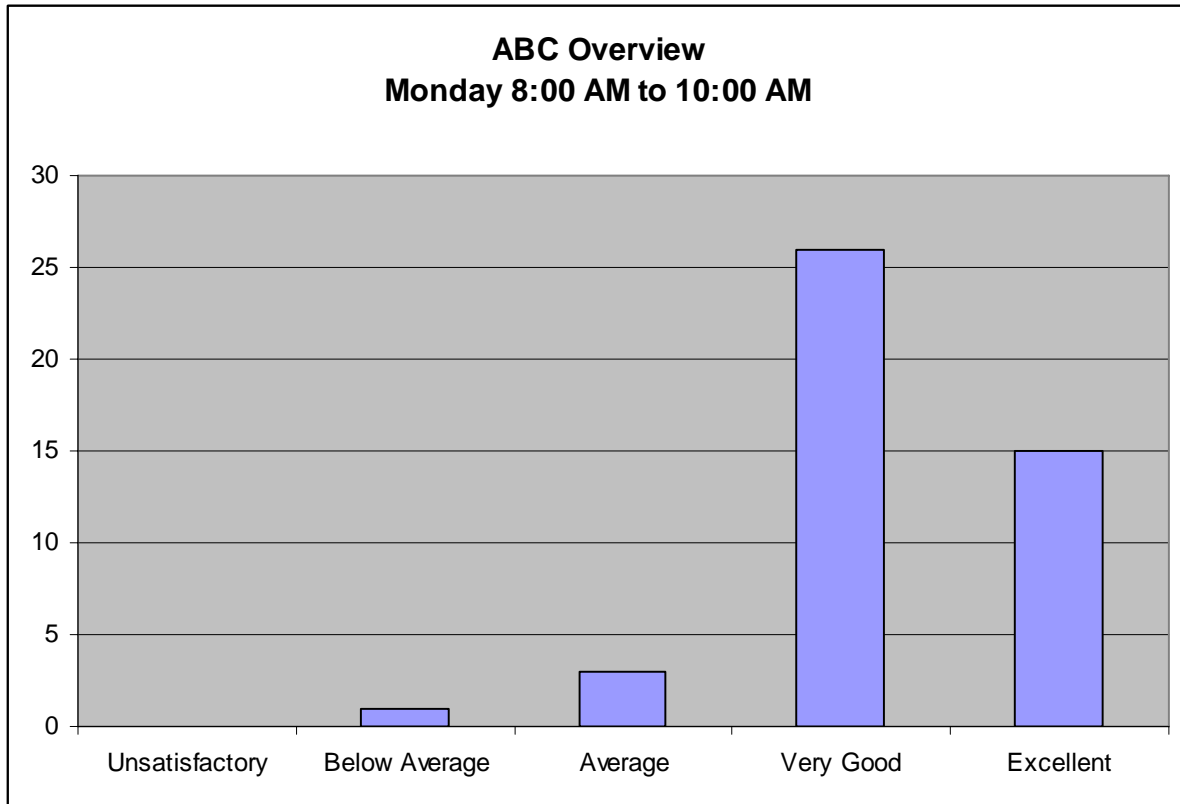




UDOT Accelerated Bridge Construction Standards Workshop Survey Summary

**Radisson Hotel
Salt Lake City, Utah
January 28-29, 2008**

ABC Overview



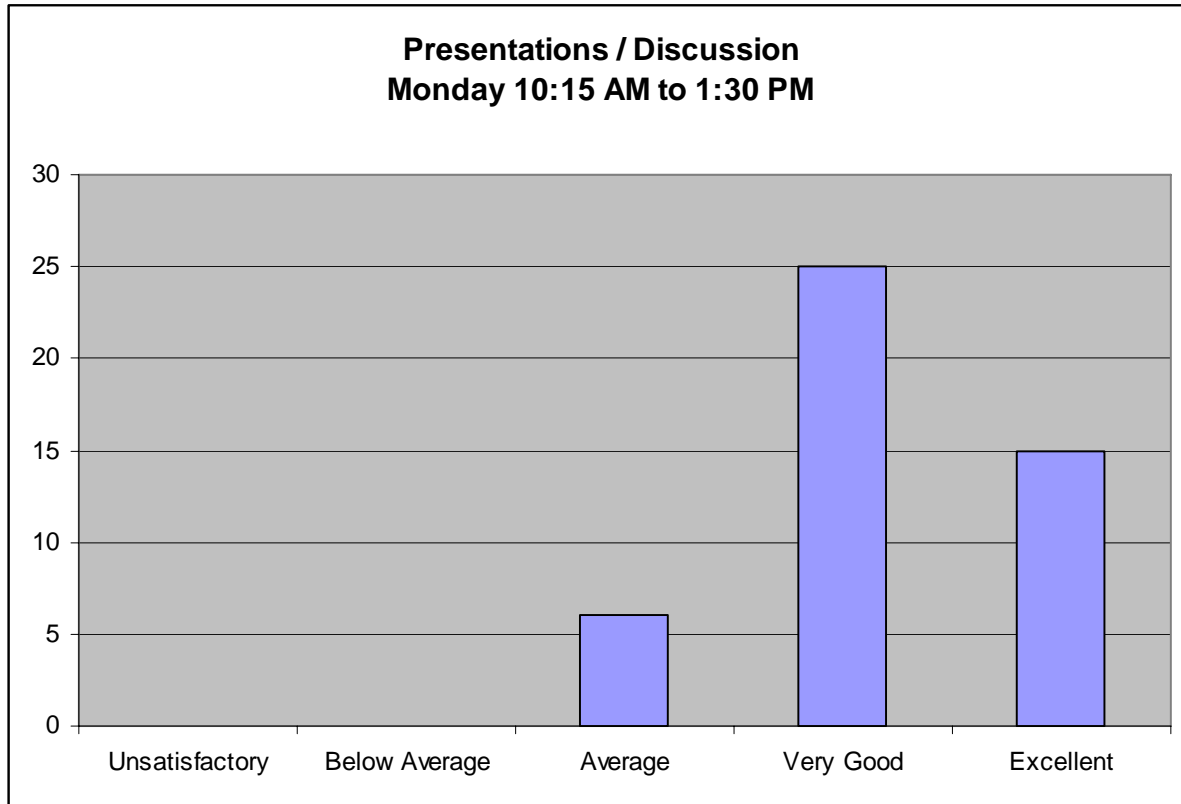
Summary of what was liked:

- Presenters were varied and knowledgeable with a broad range of areas of expertise.
- Presentations were interesting, setting a good tone for the workshop and giving a good overview of ABC.
 - Presentations were a good length, stayed within their time limit, and went into an appropriate level of depth.
- Good overview of the state of ABC both nationally and within UDOT.
- The national standards for connection details are greatly anticipated.
- The workshop was well prepared, with a good facility and good overall direction.

Summary of what was disliked:

- Some of the presentations provided no new information.
- Brief overview of the types of ABC and UDOT's organizational structure would be beneficial to getting everyone on the same page.
- Additional depths in the presentations would be good for those who are unfamiliar with ABC.
- Limited time for discussion and questions.
- Frustration with the slow speed that implementation will take.

Presentations / Discussions



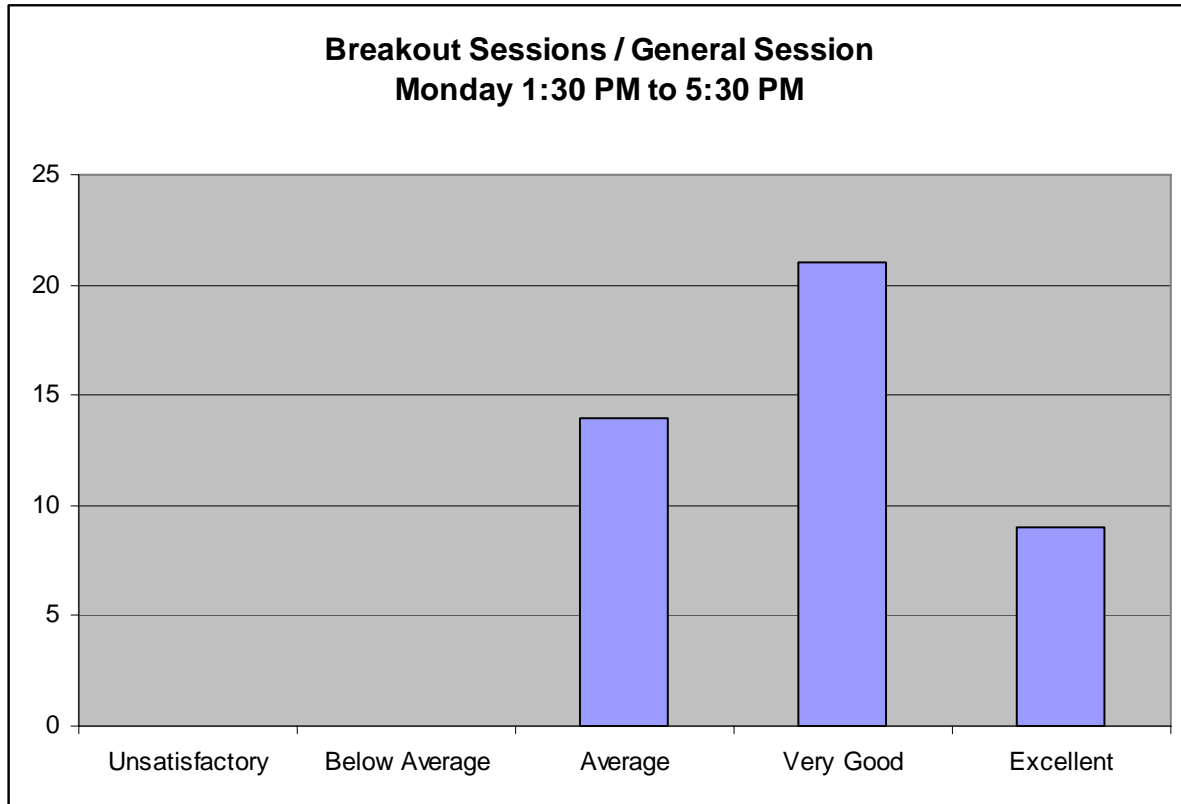
Summary of what was liked:

- Provided a wide variety of information.
 - Project applications past and future
 - Academic panel and what research they are doing
 - SPMT and standards discussions
 - Seismic presentation
- Good to see the draft standards.
 - Discussion was effective, allowing for comments from many sides of ABC.
- Presentations were well prepared, clear, and concise.

Summary of what was disliked:

- Time constraints for the presentations.
 - Hard to retain much content because it was so rushed.
 - Academic panel was unable to stay within their time limit.
- SPMT discussion dragged some.
- Provide more lessons learned in the future.
- Provide presentations by contractors, fabricators, and heavy movers.

Breakout Sessions / General Sessions



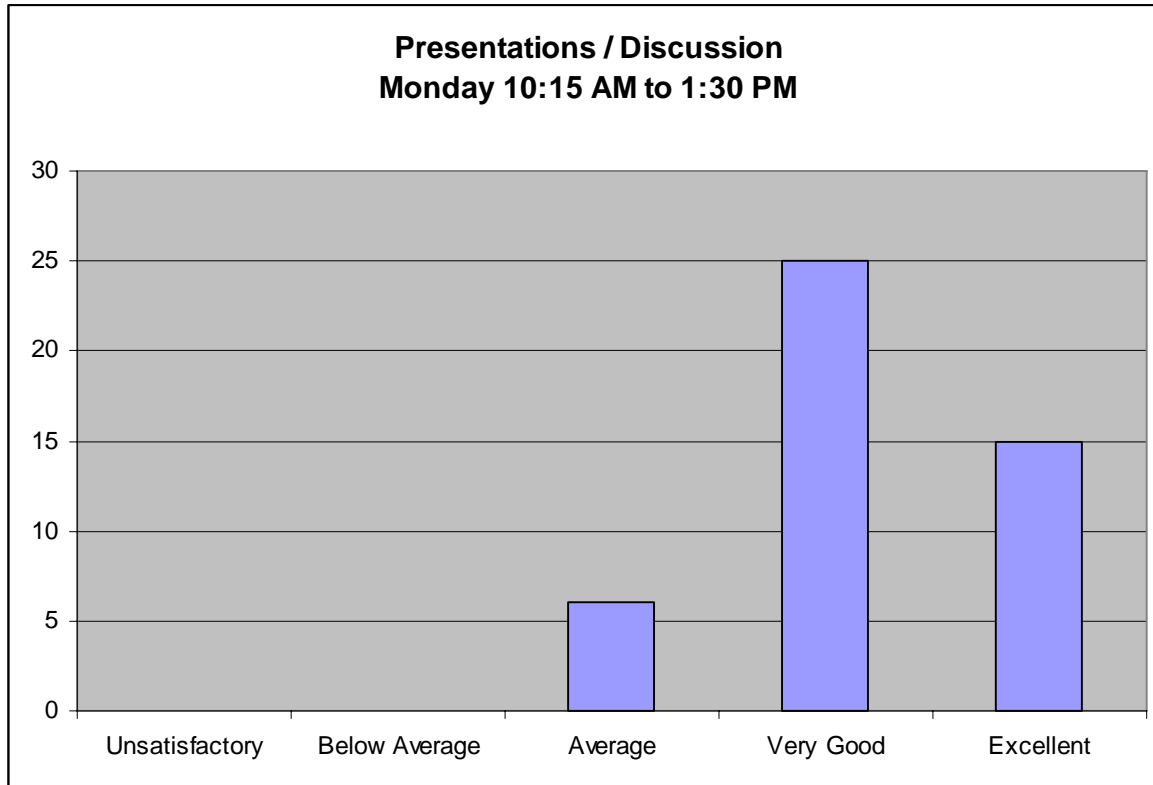
Summary of what was liked:

- Good open discussion on obstacles and opportunities, with many perspectives, including contractors and heavy movers.
- Good flow of ideas and information.
- Participation by most participants.
- Efficient general process for collection of ideas, selection, results, and feedback.
- Good facilitators.
- Binder layout with specific space for notes during the breakout sessions.

Summary of what was disliked:

- Needs better direction of discussion objectives.
- Not enough time to be creative and innovative.
- Encourage more participation by all present.
- More expertise and knowledge, especially of the projects would be helpful.
- Note displays were not effective. The flip charts were too small to see and typing the information in during the feedback session was ineffective.
- Need a more open mind to alternative solutions and applications.
- Voting may not result in UDOT's best interests being put forward.

Proposed Action Plan



Summary of what was liked:

- Good discussion with implement able tasks.
- Getting an action plan set up with tasks and timelines.
- Good facilitators.
- Better allocation of time then the day before.
- Variety of participant backgrounds. Good to have input from outside of Utah.
- Good active group participation.
- Effective feedback session to see what the other breakout groups came up with.

Summary of what was disliked:

- Not enough time to fully develop action plan and be as innovative as possible.
- Do not type the notes in during the feedback session. Do it during brainstorming in the breakout sessions or provide a speaker while it is being typed in.
- Attendance was lower on the second day and the group members were not consistent from one day to the next.
- Should look beyond the 2010 implementation, need to recognize that additional work will need to be done beyond 2010.
- Estimating resources and budget was not based on fact, it was best guess only.
- Is it realistic to complete all of the priority tasks by 2010?
- Need participation from heavy movers other than SPMT.
- Participants and leaders need more information and direction prior to the workshop.

Additional Recommendations from Other Comments:

- The information for the feedback sessions needs to be entered before the feedback session for a more efficient use of time.
- Better prepare the session leaders to know what is expected of them and what the end result will be.
- Provide additional time for the workshop, possible extending it to two full days instead of one and a half.
- Look at small and medium span structures in addition to the large spans.
- Provide a packet of information prior to the workshop to include:
 - What exactly ABC is.
 - Why UDOT wants to use ABC.
 - Draft details for preliminary review to get better comments back.
 - UDOT's current practices, goals, relationship with local industry, and UDOT's organizational structure.
- Provide larger / more readable name tags.
- Set a plan for communication with the participants after the conference.
- Provide another workshop with this format that discusses national efforts.
- Have presentations from contractors, fabricators, and/or heavy movers.
- Get all UDOT engineering groups involved in the full implementation of ABC.
- Publish the action plan created from this workshop.
- Create a core team to champion ABC and to advance ABC beyond 2010.

Appendix I

Full Survey Comments for ABC Overview

What did you like?

- Wide range of presenters.
- The concept of a national connections design manual and national vision for standard ABC construction.
- Good - short.
- Great presentations.
- Level of group experience.
- It is very clear that UDOT has decided to be progressive with bridge construction approaches.
- Valuable to bring all participants to some level of familiarity.
- Great job providing overview of ABC.
- The presenters' limited time allotment encouraged them to stay focused on a few main points - well done.
- Good speakers, interesting topics.
- Review of ABC process and projects.
- Well presented and a great introduction to the workshop.
- The presentations were interesting and didn't overrun their time allowance.
- The overview and the connection details manual will be very helpful.
- Nice to know what national efforts are taking place.
- The emphasis placed on developing ABC as a national vision and moving to make it a national standard practice.
- Quick overview and getting to the meat with national vision and the manual (CME)
- Broad range of expertise.
- I am looking forward to Mike Culmo's report on connections.
- I felt that the presenters did an excellent job of presenting.
- Good presentation of where UDOT is at.
- Good overview.
- Ranking method.
- Depth of discussion.
- The advanced preparation in setting the stage for the workshop is outstanding work.
- Various points of view.
- The mix of academia, designers, suppliers, and contractors.
- Amount of presenters, none were too long.
- Good presentations.
- Good facility.
- Good attendance by experts.
- Overall approach.
- The presentations by UDOT on the projects built in the last three years.
- Presentations were enjoyable and informative.
- Good overview of national activities.
- Well prepared.
- Good to hear about UDOT's commitment.
- Good general overview of national and local state of the practice.
- Support from top down.
- Variety of information.
- Varied group of ABC experience.

- Great way to get everyone familiar with what is happening with ABC.
- Exciting, a lot of information.
- Liked Njord.
- Opening remarks were really good to set the tone for the workshop.
- It was good to start with project lessons learned.

What did you dislike?

- Some of the presentations were a repeat of the Engineer Conference.
- Multiple welcome speeches.
- More clarity upfront on direction/focus of presentations and how they link to future workshop efforts.
- The slow pace at which this has to happen, because it is needed now.
- UDOT decision/construction - too sketchy
- Detail due to time, understandable though.
- I would have liked more overview of the different types of or ways ABC is used.
- Need to state what is considered ABC, I noticed different states, agencies, and companies defined the parameters of ABC differently.
- Not enough open discussion or time for questions.
- The FHWA presentations - nothing new.
- Fairly brief for the unexposed.
- Would have been useful to have a brief overview of UDOT organizational structure and existing programs.
- Pace was fast moving, more detail may have helped.

Appendix II

Full Survey Comments for Presentations / Discussion

What did you like?

- Good to see what type of research is being done.
- The wide variety of information.
- Project applications past and future.
- Range of topics.
- Presentations were short.
- Interesting opportunity to comment on some on-going ABC work in deck panels.
- The presenters' limited time allotment encouraged them to stay focused on a few main points - well done.
- Deck panel discussion.
- Review of thought by participants.
- Clear, concise, and well presented.
- Getting all of the players together in one room and hearing their comments and concerns.
- The presentation from 1:00-1:30.
- Enjoyed the research panel.
- Brainstorming and recommendation sessions.
- The research that has been done by Academia.
- Draft deck panel standards and SPMT brainstorming of pros and cons.
- Broad range of expertise.
- I liked the professors' overview of their research.
- Good presenters, well prepared.
- University research led into implementation.
- It was good to see what was going on recently in regards to projects and research.
- Good input from various owners, contractors, and researchers.
- Thorough.
- Good, short, and sweet.
- Well done with various perspectives.
- Various topics discussed and not just focusing on one topic.
- SPMT discussion and seismic presentation.
- Presentations.
- Brainstorming and recommendations on standard drawings and performance specs for the use of SPMT.
- Brainstorming open session.
- Variety of information and content.
- Presenters did well, presenting their information in a clear and concise manner.
- Well prepared.
- Great taste of the research efforts underway to address technical/practical issues.
- Discussions from the participants.
- Good overview of UDOT's past ABC experience and ABC plans for the future.
- Most of the issues relating to ABC were touched on.
- The seismic presentation was good - that is an area of ABC that needs to be further researched and developed.

What did you dislike?

- Lack of time to get information details of presentations.
- More time should be allotted to current research.
- Brief discussions.
- Was a little rushed - don't remember much of the content.
- Need to hold academic panel to a defined time limit.
- SPMT discussion dragged a bit.
- Wish that there was more time to get into some of the ABC connection details, but certainly understand time constraints.
- The time for each presentation was a little short.
- The professors could have been given a little more time.
- More time for presentations is needed.
- More lessons learned in the future.
- Not sufficient - No presentation from contractors, precasters, material suppliers, or heavy movers.
- Academic panel - too much material to absorb.
- Not enough time.
- Time was constrained.
- Some talked too long, beyond allotted time.
- Time constraint was a challenge to presenters; perhaps the agenda was too aggressive for the allotted time.
- Difficult to boil down years of research in to just a few minutes.
- Rushed.
- The academic panel was so rushed that it was hard to get anything out of it.

Appendix III

Full Survey Comments for Breakout Sessions / General Sessions

What did you like?

- Good to have perspectives from contractors and heavy movers.
- Opportunity to express ideas.
- Good discussion on ABC obstacles and opportunities.
- Good group discussion.
- Open discussion, vast views.
- Good discussion from a broad representation of the bridge industry.
- Good opportunity to hear about a real project and propose solutions for greater use.
- Participation throughout ABC industry - owners, engineers, contractors, specialty contractors
- Great job by Will Nickas of facilitating.
- Facilitator (William Nickas) was very good. He did a great job of keeping the process moving. Thad Pinkerton was also very helpful.
- Sometimes lively discussion.
- Good flow of ideas.
- General process is a great idea.
- Being able to vote on the action items.
- The system of breaking out and developing recommendations for UDOT to implement.
- Diversity of group members, open discussion format.
- Being able to participate in a "think tank" forum and gaining insight from the experience of others.
- Academic panel and breakout sessions were productive and informative.
- Hearing everyone's ideas.
- I really liked that the manuals had a spot to write what was being discussed in the breakouts.
- Output of recommendations.
- Discussion regarding obstacles is best done with seven points of view, which this venue seemed to provide.
- Good input from UDOT and industry experts.
- Good facilitator.
- Seismic ABC.
- Good discussion and deliberation.
- Good facilitation by Mike Culmo.
- Open discussion about opportunities, ideas, and processes of various agencies.
- The mix of precasters, designers, and contractors.
- Results.
- Open approach.
- Feedback.
- Collection of ideas in small groups (teams).
- Open discussions that broadened my horizon, expanded my knowledge on how projects were being delivered in Utah.
- Good discussion despite shortness of time.
- Very informative.
- Moderator did well as far as managing time and getting people to participate.
- Efficient.
- William did an excellent job facilitating the group.

- This was the heart of the workshop where value was added.
- Participation of most of the participants.
- Process selection.
- Working together with different points of view.
- Good discussion and interaction.
- Good cross section of participants.
- Good discussion on topics.
- The discussion.
- It was good to have many sides of ABC - contractors, consultants, national representatives.

What did you dislike?

- Not enough time to fully explore options in the breakout sessions.
- Discussion was dominated by loud voices - whether ideas were worthwhile or not.
- Relevance to specific project unclear.
- Did not have enough expertise on CMGC topic assigned to our group.
- Wasn't real clear on the discussion objectives.
- Better direction and focus would have helped, some groups were very rushed.
- Our project led to opportunities with limited applications.
- Voting may not result in UDOT's best interest being put forward, if the industry interests were put ahead of the owner interests.
- I think the sessions went a little bit long
- I should have known a little more about our bridge.
- I was a little uncertain on the process that we were going through.
- Have breakout leaders call on those who are not saying anything for a response, everyone's input is needed.
- Provide UDOT employees to breakout sessions that pertain to their job.
- Didn't seem to be enough people at session.
- Recommend to make the writing on the flip charts to have taller row height so it can be seen from further back.
- Poor instruction.
- Not enough time.
- Limited open mind for alternative solutions.
- Not enough time.
- Lack of time for in depth discussion.
- Seriously needed more time to fully discuss and develop issues.
- Not enough time to be creative and innovative.
- Time constraint was a negative impact to brainstorming - otherwise format and concept were on target.
- It took the group a little while to come together and be productive.
- Typing the information during the feedback session took time.
- The introduction seemed a little complicated.
- Too rushed.
- Not enough time.
- It was hard to read information on the flip charts during the summary session.
- Refining and prioritizing.

Appendix IV

Full Survey Comments for Proposed Action Plan

What did you like?

- Good to see how the workshop process produced activity for UDOT to follow up on.
- Coming together of many different people from different backgrounds.
- Good action plans.
- Great discussion and group participation, good ideas to redistribute expertise based on topics.
- Assigning completion dates for tasks.
- The workshop was quite effective in identifying key issues and developing them.
- Contribution from outsiders trying to use successful practices in other locations to help UDOT.
- Completed the task assigned.
- Good discussions, implement able tasks.
- Good discussion.
- The system was good for this activity.
- Feedback from all of the other groups.
- Gaining from the knowledge and experience of others and being able to provide recommendations to UDOT.
- Discussions in the breakout session on the recommendations and obstacles.
- Input from sources outside of Utah.
- The action items given to us that should be implemented.
- Output of action plans.
- Active discussion to solve problems.
- Prioritization.
- Outstanding work to provide UDOT with an action plan to air by 2010.
- Timelines being set.
- Great outcome and results for UDOT.
- Changed to section 2 for discussion regarding SPMT.
- Better direction.
- Results will benefit UDOT.
- William's Guidance.
- Detailed results and to the point recommendations.
- Competent session chair.
- Information discussed.
- Good group participation.
- Good group moderator.
- Group was very active and worked well together.
- Had adequate time to work through issues - William kept it on task.
- Time line (target date), dollar value, etc.
- Good description of activities.
- Tasks defined.
- Good discussion of the proposed action plan. This will give UDOT excellent information to plan the future of ABC.
- It seemed we were able to boil things down to a few tasks, which was very gratifying.
- It was good to see the recommendations of all of the groups.

What did you dislike?

- The speed at which the action plan was developed precludes intense thought and consideration. While many brilliant minds worked on this, chances are good that some very important and far-reaching ideas were overlooked.
- 2010 Implementation limits or focuses efforts. Recognize additional work must continue beyond 2010 implementation plan
- Appears to be a lot of tasks that need to be done. Is this realistic?
- Felt that there was not enough time to fully develop the plan with activities plus budget.
- Too much crossover between breakout groups - many attended this group on the second day who were not there on the first, and several were not there on the second day that were there on the first.
- Perhaps rather than taking the time to write down items, and then type them in the larger group discussion, the comments could have been typed in during the smaller group discussions. This would have saved time, and more focus could have been given to presenting results.
- In addition to the SPMT industry, it may have been beneficial to have representation from other heavy movers (rollers, launching, etc.)
- Not everyone attended the second day (probably weather was a factor).
- Having to miss part of the process due to a UDOT meeting that I had to attend.
- Discussion participation should have been by all.
- Some attendees may have needed more preparation off-line.
- The group leaders should be prepared better prior to the workshop as to what is expected of them.
- I had to leave at 11 AM to catch my flight back to DC at 1 PM.
- Attendance is weak.
- Estimating resources needed and budget in the time available was best guess only and all numbers should be reviewed and revised as necessary.
- Not enough time to fully develop recommendations as fully as we could have.
- More time would have been better.
- Typing the information during the feedback session took time.
- There was some confusion about what we were to do.
- Method of listing was not productive for the talent in the room. Provide speakers while the notes are being typed, then do a summary.
- Not enough time.
- It may run more smoothly if the notes could get typed up during the break or the individual sessions so they don't need to be typed during the review session.
- The second day there was low attendance by contractors due to big bid day (Tuesday).

Appendix V

Full Survey Comments for Additional Comments

Positive / Neutral Comments:

- Very well run workshop with clear end objectives.
- Pieces fit well together as we progressed through the breakout sessions.
- Make sure to keep me (Frank Russo) involved in these activities. They are critical to the success of my TRB R04 project. I can provide support to UDOT through the TRB efforts free of charge.
- This workshop is an excellent step towards ABC implementation.
- Great workshop, thank you for the opportunity to attend.
- Wonderful food.
- The workshop was very well organized. There was a good cross section of people present. I'm not a structural engineer and I found the technical aspects of ABC Bridge Construction interesting.
- We very much look forward to UDOT's implementation of ABC for their bridges. We think this will have carry over to the other states across the country.
- Great idea to get feedback from such diverse backgrounds.
- I would like to see other DOTs adopt this type of partnering and sharing of ideas to improve and infrastructure that benefits all of us.
- Encouraging effort. Glad to see UDOT is being proactive in this endeavor.
- Thanks for all your help. You have given us some great direction.
- There was good diversity among workshop attendees.
- Great workshop. Great open discussion.
- Very good conference.
- I thought that the workshop was very beneficial to all and especially to UDOT. I really like the openness of the UDOT representatives as to their shortfalls and needs.
- I like the fact that the presentations were provided on CD and printed PDF format.
- Good lunch.
- Organization and moderation was very good.
- Very interesting workshop.
- Thank you for inviting me to the workshop.
- The workshop was very well planned and organized.
- I (Sameh S. Badie) will be happy to help UDOT developing the specifications and plans for precast deck panels.
- Good job! Having 1.5 days dedicated is very practical; keeps everyone on task and focused.
- This workshop is well organized.
- Mary Lou thanks to you and the Utah DOT and FHWA for the opportunity to represent the AASHTO society. The subcommittee would be very interested in the final report from this workshop and a presentation at the 2008 or 2009 annual conference.
- The entire workshop is very well organized and conducted. Good participation from the participants. Good to see the contractors and heavy movers in attendance. The report of this workshop will be a good example to follow for other state DOTs.
- Good overall. Well balanced with condensed information at 1.5 days. Thanks.
- Good food, good room, good support.
- I (Raymond Earl) sat in for Chris Potter. Please email any results of follow-up to rearl@utah.gov.

Negative Comments / Recommendations:

- Word processing time not efficient.
- Suggest employing online forms in each breakout which are then linked to the general session.
- The voting methods may not yield a comprehensive approach to implementation - there may be other things that need to be done, but it will help UDOT focus on the most important items.
- The name tags were very difficult to read due to the dark color and small name print.
- It would help if participants had some opportunity to review some of the draft details coming into the workshop.
- Have a communication / follow-up plan after workshop to continuously engage the participants.
- One thing that I think would help things run smoother is that it seemed the session leaders did not always have the same vision or idea of what Mary Lou was trying to accomplish. I suggest a pre-workshop kick-off meeting with session leaders going over the objectives and tasks.
- It seems that at least some of the people who attended didn't have a full understanding of what ABC is. Perhaps giving a more detailed description of what ABC is and how UDOT wanted to implement it in the future would have been beneficial information to send out to those who RSVP'D for the workshop prior to the workshop as prep materials.
- Schedule was a little tight.
- More time for discussion during breakout sessions would have been desirable on Monday.
- More detail in UDOT's current practices, goals, and relationships with local industry would have been helpful.
- More time was obviously needed as we went way over time in the agenda. Next time consider two full days with another hour for each breakout and one additional hour presentation by local industry (consultant and contractor if possible) to explore local issues with folks from out of town.
- More time for the breakout sessions would be better.
- A similar format that covers the national efforts as well as lead state initiatives would go a long way toward ABC throughout the industry.
- In Vermont we are deploying "rapid" bridge construction for small structures to reduce environmental impacts to the riparian corridor - in addition to the benefits to our customers. Some attention to small and medium span bridges would help gain experience for designers and contractors alike.
- Contractors and precast suppliers experience presentations would be interesting to see too.
- Would have better liked discussions on more specifics such as means and methods.
- Would have liked to hear UDOT's discussion on why ABC.

Ben Tang (ORDOT) Implementation Suggestions:

- Keys for UDOT to be successful for the long haul:
 - Declaration of state's policy to make ABC standard practice by leadership - already in place - outstanding work.
 - Fine tune application or implementation plan by engaging the whole UDOT engineers to institutionalize implementation plan (needs to be done by UDOT for its engineers).
 - Package two year (2008-2010) activity plan for UDOT wide implementation.
 - Identify and develop research for gap in knowledge of ABC and seismic issues for 2008 to 2013.
 - Appoint and train a core team to champion ABC projects and develop training for UDOT engineers to advance ABC - 2008 to longer term past 2013.
 - Continue to work with FHWA, AASHTO, and TRB to promote and advance ABC in other states.
- If UDOT could implement the ideas and action plan developed in this workshop, UDOT will have more resources to replace their deteriorated bridges.
 - The Utah citizens will support UDOT.
 - The FHWA will support with funding.
 - The next reauthorization would make ABC a national effort with more resources to come.
- UDOT is doing an outstanding job in changing the nation's culture in bridge construction.